

"The Future of Defense Maintenance & Support"

2nd Annual DoD Maintenance Symposium

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October 19, 1998

Good morning, ladies and gentlemen. I'm delighted to be here with you this morning.

As you know, the theme of this conference is "Maintenance: Today's Challenges...Tomorrow's Vision" Discussing the topics of vision and future, much less the future of a complex subject such as defense maintenance, is obviously influenced by our individual experiences and views. Nonetheless, we in industry and government...even the leaders of this country and the world as a whole...must confront tomorrow's challenges today, and make the changes which will decide our future, in this case, the future of maintenance and logistics support.

As a matter of coincidence, a few weeks ago I had the opportunity to be part the second-annual Logistics Reform Day at the Pentagon. The forum was a roundtable discussion with the DoD's senior logistics commanders. The theme of the roundtable discussion in the Pentagon was "Seamless Support for the 21st Century Warfighter." It is clear, that roundtable theme and the topics on this conference agenda are totally aligned.

Those of us who participated in the Pentagon roundtable were, as we said, in "violent agreement" that we, who are in the business of providing products and services supporting the defense needs of this country, have one mission:

*To assure we provide to the warfighters who depend on
us everything they need, when they need it, to enable
them to successfully accomplish their mission.*

I hope all of you here today are equally in "violent agreement" that that is our mission!

As you know better than I, effective, efficient maintenance modification and modernization are key elements of an integrated approach to support the defense needs of this country and those of our allies. Addressing the issues of cycle time, quality and affordability are essential to supporting the warfighters' mission.

The future of logistics support must be addressed in the context of *reducing customer cost of ownership*, and that must be the focus of this conference. I'd like to spend some time this morning giving you my views on how we achieve that future and what I believe we need to do to get there.

Let me frame my comments in the context of a management process many industry and government leaders use to chart a course for organizational change and growth. There are three major tenets:

- First, we must understand and define our current state;
- Then, we should project the attributes of our desired future state;
- And finally, we must define the key actions and strategies necessary to fill in the gaps to achieve our future state.

Let me start by offering my views of the current state of logistics support. The industry and government infrastructures engaged in providing maintenance and logistics support today have developed over the last 75 to 80 years. If we look back at history over those decades and the changes related to aircraft maintenance, repair and overhaul, we are provided some insight as to where we find ourselves today.

Early pilots not only in many cases built and flew, but, as well maintained, repaired and supported their own aircraft, even if it meant sleeping under the wings. With the advent of commercial air travel and more rigorous operational schedules, airlines established logistics support and maintenance capabilities as a stand-alone function.

Then came World War II. At first, the military was desperate for all the help they could get in supporting their rapidly growing defense fleets. They invited...in reality they commandeered...the support services of the private sector to maintain military fleets.

Later on, the military services began to worry that private contractors, in returning to civilian pursuits, would abandon the business of support and maintenance. As a result, the military began to establish infrastructures of their own, both inside and outside the United States.

To some extent, the concern of the military services regarding support by the private sector of defense products is well founded. Internal to our industry, our infrastructure was, and in many cases still is, focused on providing weapon systems and component product sales, not the business of providing logistics support of those products as a *business*!

In my view, the current state is manifest in a number of different attributes endemic to our industry:

- Support of products has been viewed by some as a “cost of doing business,” rather than an essential, required and profitable business opportunity;
- Organizational infrastructures exist that are disproportionate to the level of support they are required to serve;
- Support organizations are largely transaction focused;
- Clearly many redundancies remain in competencies between the customer and the supplier...public and private;
- In many ways, the result of these attributes are large stocks of spare parts and supply inventories sitting in multiple warehouses with slow inventory turns and long lead times for delivery; and finally,
- As often is the case, the parts needed are not the parts readily available in the warehouse or the supply system!

I firmly believe a clear focus on our common support mission – putting in the hands of the warfighters everything they need, when they need it – will bring all of us in both the public and private sectors to the second stage of my management process, that is our desired future state. Here is what that means to me. The future state will be founded on attributes such as:

- Largely commercially based support systems and infrastructures that allow the cost efficiencies inherent in peacetime to be flexibly deployed to support rapid transition and surge capability when our warfighters are called upon;
- Prime contractors partnered with their military customers as well as preeminent suppliers with complimentary, integrated competencies;
- Fewer, more preeminent suppliers who are willing to invest the brainpower and resources on behalf of the support mission to be preeminent in their competency;
- Paperless, electronic supply systems that take advantage of the seemingly unlimited electronic infrastructures that enable boundless communication;
- Support requirements dependably delivered anywhere in the world in an extraordinarily fast system, just like FedEx and UPS do today.
- Concepts such as prime vendor support, flexible sustainment, supply chain management, and trigger-based item management deployed in support of all essential military products;
- A streamlined acquisition process institutionalized that has a fundamental bias for ease and speed.
- A cultural change evident within industry such that innovative business-based solutions to customer support needs exist to the same extent innovation is focused on cost-effective development of complex weapon systems.

- And lastly, and perhaps the result of those preceding elements being brought to bear, future logistics support budget levels that are lowered and thereby evidence we have in fact reduced the customer's cost of ownership.

Progress is being made. Events like this one show that our industry and our customers recognize change is essential to reducing cost of ownership. But if we look honestly, it's clear significant gaps remain in where we are today and where we need to be.

Again, following my management process approach, let me present five thoughts as to how we might close these gaps.

First, culturally, both the DoD and industry must recognize we need to be in this together. Public/private partnerships are powerful tools. They allow both sides to better understand each other through closer communication, and they allow innate competencies on both sides to be captured so public and private organizations become complementary rather than redundant.

When Boeing formed a partnership with Ogden Air Logistics Center earlier this year to compete for the McClellan workload, there were a good number of people who were skeptical on the eventual outcome. Could a public/private team come together in a relatively short period of time to first, collectively produce a winning proposal for the competition, and then put the planning in place to execute effectively?

In the process of doing that, we learned a lot about each other, found ways to capitalize on our unique capabilities, and came up with a solution that offered the Air Force real cost and effectiveness benefits. In fact, the Air Force estimates taxpayers will save \$638 million over the nine-year span of the contract. That's a 30 percent reduction in the customer cost of ownership!

As an aside, I will note the team at Ogden found out how hard it is to compete and how complex and incredibly laborious are the requirements of the government acquisition processes. That insight alone may have been a worthwhile reason for our partnership.

Secondly, we need to continue to eliminate redundancies. On both the DoD and industry sides, we need to find the overlaps and make rational decisions on where the competencies should reside. This should be based on a simple criteria...the competencies should reside with the provider who is committed to preeminence in that competency, and is committed to investing the brain power and resources necessary given the core military need! Second best isn't good enough!

This redundancy issue is one that applies to both the public *and* private sector. As an example, as a prime system contractor, we at Boeing have traditionally had design teams overseeing suppliers in the detailed design of their systems. It baffles me as to why we believe we have to know as much about component design as the supplier providing the system. We are now dealing with those redundancies and we are in the process of collapsing to those staffs that support value-added requirements.

Our infrastructures, which remain today, in some cases, result from a question of trust or confidence between the parties and a willingness to "let go." We need stronger, slimmer, more efficient and responsive organizations focused on value-added benefit, not oversight for oversight's sake.

We need to sort out our roles and missions. Our suppliers should be fewer, but preeminent in what they do. In true partnership fashion, we must work together to deliver the promised end product to the customer, with the quality and at the cost we promised.

Through our preferred supplier program at Boeing, we've been able to reduce our number of suppliers by about 50 percent by partnering with preeminent companies, both large and small, with the specific competencies our customers require. As well, we have seen a reduction in cost to our customers of approximately 6 percent per year in real terms over the last four years as a result of focusing on improvements with suppliers, rather than investing our resources maintaining poor performers.

Third, we need to focus on systems, processes, skills and cost infrastructures aligned to the business needs of supporting products and services, rather than maintaining those which are primarily focused on defining and producing weapons systems and components.

If we use the right tools, systems, skilled people, processes and cost infrastructures, we in industry have seen incredible cycle time and cost improvements. In our Boeing structural repair business, for example, we assigned a dedicated team with dedicated tools and processes, and a rate structure tailored to the "business" of repairing and modifying aircraft structural flight control surfaces.

With this new business focus on an area that was once viewed as a necessary but generally undesired customer-support activity...not a business...we have seen turnaround times slashed by a factor of five and repair costs reduced by more than 60 percent. We are looking to expand our product repair competency to other products, including non-defense opportunities.

Fourth, we need to recognize that consolidating, reducing and even closing operations, including those resulting from the BRAC process, doesn't need to be the end of the world.

Today a substantial business is being built in Texas in a former Air Force facility. Our Boeing Aerospace Support Center at Kelly Air Force Base is succeeding because it was built on a strong business plan and makes good business sense. We have taken a tremendous facility with a skilled work force, and by applying many tailored, commercial processes, we are creating a low-cost, quick-response, top-quality maintenance and modification center for large, missionized aircraft.

That facility is dedicated to preeminence and we have taken the actions required to institutionalize that capability. C-17s, KC-10s, KC-135s and even MD-10 passenger-to-freighter conversions will all benefit from that preeminence! The revitalization of Kelly is an on-going success story that provides a future for thousands of people who only several months ago believed they had no future.

In turn, it's important to recognize that some facilities need to be closed down, both public and private. We cannot continue to shelter ourselves from making hard decisions with the hope that the future will somehow rationalize today's infrastructure. I believe in that context, the future is today.

Fifth and finally, we have to address some fundamental issues in the acquisition and contracting processes. While we strive toward commercial practices and contracting, it clearly is not as innovative as it should be.

Let me draw a contrast. Through a joint venture between Boeing and GKN Westland Helicopters, the United Kingdom Ministry of Defense is acquiring a helicopter training capability for its Apache helicopters. The joint venture, known as Aviation Training International Limited, is using private financing to develop the training systems and facilities.

The training services are being provided to the MOD under a commercial business arrangement based on a pay-for-services concept, which includes a 20-year guaranteed student throughput from MoD. We as the training provider warrant the quality of the student to perform the required mission.

That type of contracting is difficult in the United States because of acquisition regulations and the inability of the services to make long-term commitments. This needs to change if the benefits of commercial contracting are to be made available to defense contracting.

That having been said, we must also recognize that commercial practices are not always the right solution. While they allow more flexibility, and may have the perception of being faster, better and cheaper, commercial practices at times are not totally structured for meeting defense needs. It is hard for industry to warrant the outcome of battle, unlike commercial airline reliability. So we need to carefully tailor commercial approaches to military needs.

In closing, let me summarize what I believe are the keys to achieving our future state:

Both industry and the public sector must be prepared to go out of some businesses as we reduce redundancies and focus on preeminent competencies.

We need to institutionalize the mechanisms that make possible rational public/private partnerships enabling the easy exchange of work in both directions to take advantage of preeminent competencies on both sides.

And lastly, we need to take the message to Congress that doing business in these new ways is absolutely required. There must be a balance between maximizing efficiencies and reducing logistics support costs, and the political objective of retaining jobs.

Is change underway? Yes, I think we all see it. We have a long way to go, and the gaps are deep in places. But I'm confident that if we first have a clear focus on those changes that result in better, faster, cheaper preeminent maintenance and logistics support...and second, have the resolve to make the hard decisions required to drive those changes, we will deal with today's challenges *and* move to a future state of logistics support founded on industry and government partnerships, which provide timely, cost-effective "seamless" support, thereby enabling fully mission-capable warfighters in the 21st century.

That must be the mission we collectively undertake here today!

Thanks very much for listening. I've enjoyed being here with you this morning.